

What is Claimed Is:

1. A sheet processing system for feeding sheets successively along a supply path to a sheet deposition station where the sheets are collected, the sheet processing system containing means for temporarily interrupting the supply of successive sheets to the sheet deposition station to enable processing of the sheets collected at the sheet deposition station, the means for temporarily interrupting the supply of successive sheets comprising:

a sheet buffering member having an endless outer surface,
supply means for supplying sheets successively to the endless surface of the sheet buffering member, and
means for conveying sheets assembled on the endless surface of the sheet buffering member to the sheet deposition station, wherein the sheet buffering member, when sheets are supplied thereto, is continuously cycled with a cycling period for assembling successively supplied sheets on its endless outer surface in a superimposed relationship, the superimposed relationship being such that each successive sheet of the conveyed sheets at least partially overlaps with the preceding sheet assembled on the endless surface of the sheet buffering member while avoiding completely covering the endless outer surface of the sheet buffering member.

2. The sheet processing system as recited in claim 1, wherein the cycling period of the sheet buffering member is smaller than or equal to the interval between the arrival of the leading edge of a first sheet and the

arrival of the leading edge of a second successive sheet at the endless outer surface of the sheet buffering member.

3. The sheet processing system as recited in claim 1, wherein the cycling period of the sheet buffering member is smaller than the interval between the arrival of the leading edge of a first sheet and the arrival of the leading edge of a second successive sheet at the endless outer surface of the sheet buffering member.

4. The sheet processing system as recited in any preceding claim, wherein the endless outer surface of the sheet buffering member has at least a portion thereof composed of an adhesive material, said portion covering the entire circumference of the sheet buffering member.

5. The sheet processing system as recited in claim 1, further comprising at least a first rotatable pressure member and a second rotatable pressure member, each rotatable pressure member being resiliently urged against the endless outer surface of the buffering member while any sheet assembled on the cycling buffering member is guided therebetween.

6. The sheet processing system as recited in claim 5, wherein the first and second rotatable pressure member are positioned such that when sheets are assembled on the endless outer surface of the sheet buffering member, at any time at least one of the first and the second rotatable

pressure member contacts the superimposed sheets assembled on the endless outer surface.

7. The sheet processing system as recited in claim 1, further comprising control means for controlling the sheet buffering member to operate in a first mode or in a second mode, the sheet processing system being adapted such that, when the sheet buffering member is controlled by the control means to operate in the first mode, sheets are fed successively along the supply path to the endless outer surface of the sheet buffering member and successively conveyed therefrom to the sheet deposition station where the sheets are collected, whereas, when the sheet buffering member is controlled by the control means to operate in the second mode, the sheet buffering member is continuously cycled with a cycling period for assembling successively supplied sheets on its endless outer surface in a superimposed relationship, the superimposed relationship being such that each second or any following sheet of the conveyed sheets at least partially overlap with the preceding sheet assembled on the endless surface of the sheet buffering member while avoiding completely covering the endless outer surface of the sheet buffering member.

8. The sheet processing system as recited in claim 7, wherein the control means comprises a switch for acting on the buffering member such that the buffering member is controlled to operate in the first or in the second mode.

9. The sheet processing system as recited in claim 1, wherein the sheet deposition station is an intermediate sheet deposition station.

10. A method for controlling a sheet processing system in which a sheet buffering member is provided to operate in one of at least a first mode and a second mode, the sheet buffering member having an endless outer surface; and

supply means is provided for supplying sheets successively to the endless outer surface of the sheet buffering member which, comprises controlling the sheet buffering member to operate in the first mode, wherein sheets successively supplied to the endless outer surface of the sheet buffering member are successively transported on and released from the endless outer surface of the sheet buffering member, or in the second mode, wherein

when the sheet buffering member is controlled to operate in the second mode, the sheet buffering member is continuously cycled with a cycling period for assembling successively supplied sheets on its endless outer surface in a superimposed relationship, the superimposed relationship being such that each second or any following sheet of the conveyed sheets at least partially overlap with the preceding sheet assembled on the endless surface of the sheet buffering member while completely avoiding the covering of the endless outer surface of the sheet buffering member.